25X1A [redacted]

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CENTRAL INTELLIGENCE AGENCY

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NO. OF ENCLS. 2 (LISTED BELOW)

25X1C

DATE ACQUIRED BY SOURCE : [redacted]

SUPPLEMENT TO REPORT NO.

DATE OF INFORMATION : Sep 50

25X1X [redacted]

25X1X [redacted]

This is the sixth report [redacted] and further exploitation is being conducted. Requests for further information can be accepted. 25X1A

General

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/Reference is made to Report [redacted], an area description of Podberesje and [redacted], a description of the Organization of Zavod #1./

1. [redacted] no information on the use of this plant before the Junkers and Siebel groups arrived there, but assume that it was used in the production of seaplanes, as there were two old seaplanes behind the plant, as well as many seaplane parts, including floats. The main building was completely empty when the Germans arrived, and the first two months were devoted to uncrating machinery and equipment shipped from the Junkers plant in Dessau and the Siebel plant in Halle. The machinery arrived in good condition. The Soviets had ordered the machinery packed for shipment several months before they ordered the personnel transferred. This time was spent in preserving and crating the machine tools. Upon arrival, the crates were literally rolled off the railroad cars onto the ground and were found scattered along the tracks for about three stops below Dmitrov (56° 17' N - 37° 30' E).

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2. [redacted] a model of the plant [redacted] which showed that an 25X1A other administration building was to be built in front of the old main building. This would have enabled the workshop offices to move out of the workshops, giving the latter more 25X1A space. [redacted] and had heard nothing further about the proposed construction. There were no preparations made for carrying on the work underground, since the plant had no basement. None of the other buildings had 25X1A basements either, and [redacted] not know what would happen in case of an air raid.

Site Layout

25X1X (See Enclosure (A), drawn to a 1:2000 scale. The dimensions of the fenced area were taken from [redacted]
25X1X [redacted] Ivankovo. Except for the fence (Point 5), all dimensions are [redacted] 25X1A

25X1A 3. [redacted] the following, regarding the site layout of Zavod #2:

Point 1 Lake Moscow

Point 2 Cross-section of the Dike

Point 3 Road

Five m wide, dirt-covered.

Point 4 Barriers

These were raised for traffic by plant guards armed with carbines.

Point 5 Dural Fence

This fence was 3 m high and in good condition. Sheets were used for the bottom half of the fence, and spaced extrusions, akin to a picket fence, formed the top.

Point 6 Watchtowers

Steel structures, approximately six meters above the ground; each had a wooden house on top. The towers had searchlights and were manned by one guard, armed with a carbine.

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Point 7 Concrete Road

This road, 10 m wide, led over the dike. [redacted] a large concrete slab there, resting partly on the dike and partly on the fill for the road.

Point 8 Blockhouse

A log building, 16x10x5 m, single-storied and which had a tar paper covered gable roof. Part of the building housed LIC, a group of Soviets who were responsible for maintaining liaison with the 25X1A flight testing groups at Ramenskoye (55° 34' N - 38° 14' E) or at other airfields. (See Report 25X1A [redacted] for further details concerning this group.)

Dr Wehde, of the Siebel Group's Department 18, occupied part of the building. [redacted] no real knowledge about Dr Wehde's work, [redacted] closely related to the field of radar. [redacted] three ships similar to mine sweepers on Lake Moscow. [redacted] these ships were engaged in some activity connected with the blockhouse building because [redacted] signals were exchanged by means of blinker lights and flag semaphore.

Point 9 Shooting Stand

A steel frame set in a concrete foundation, with two adjustable T-beams. Guns were bolted on these T-beams. The only firing [redacted] was in connection with tests on experimental fuel tanks. The fuel tanks had many small tubes inside of them to reduce the effect of leakage from gunfire.

Point 10 Liquid Rocket Test Stand

The Walter-Ofen liquid rocket power plant was tested here. It had a steel frame set in a concrete foundation. This area was "off limits" to all Germans not actually working on the power plant.

Point 11 POL Warehouse

A one story brick building, 12 x 6 x 3.5 m, which had a flat tile roof. Primarily, kerosene, gasoline, hydraulic oil and various other oils were stored in 100 liter metal barrels. I do not know from where the barrels had been shipped. About 25-30 barrels of various liquids were stored in this building at all times. Fuel was delivered almost continually, whenever tests were being run. A fireman was always stationed nearby, and there were several foam fire extinguishers in the immediate vicinity.

Point 12 Fire Extinguisher Test Building

A brick building, 12 x 4.5 x 3 m, which had a flat wooden roof covered with tar paper. Measuring instruments and equipment used in the experimental aircraft fire extinguishing system being developed by Boris von Schlippe (of OKB-1, Dept 21), were kept here. Various wires were conducted from within the building to the outside area to the JUMO 004, which was undergoing tests.

Point 13 JUMO 004 Engine

In testing, fire extinguisher systems were installed on this engine.

Point 14 Fire Wall

Constructed of steel-plate, and used as a shield against flames from the engine during testing.

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Point 15 Greenhouse

The greenhouse had a steel frame, glass top and sides, and was 18 x 8 x 2.5 m. It furnished flowers for the administrative offices; vegetable gardens surrounded it.

Point 16 Carpenter Shop

A brick building, 40 x 16-18 x 10-12 m, two storied, and having a gable roof, covered with red tile. The shop had no connection with aircraft construction; it furnished the plant with wooden desks, tables, benches, etc.

Point 17 Fuel Bunker

This area, resembling an earthen mound, was about 12 x 12 m. Fuel for the Walter-Ofen (liquid rocket power plant) was stored underground. I heard that this fuel was referred to as "T und C Stoffe" (T and C stuff). I do not know its chemical composition, although some of [redacted] that there was a high percentage of hydrogen peroxide in it. It arrived in Bolshoi Volga in tank cars, via the railroad. [redacted] Enclosure (A) on which this railroad is pinpointed. The fuel was loaded from the railroad cars into tank trucks and brought to the plant, where it was emptied into special tanks. These tanks were underground [redacted] The liquids were continually watched by members of the Siebel chemical group, who took temperatures daily, compiled data, etc of the stored fuels. [redacted] the liquids were delivered at "100 something" and when they reached "82 something", they were no longer usable. I think that these figures were comparable to octane ratings in gasoline. [redacted] a tank explode while it was being filled with water and assumed that it still contained some of the liquid.

Point 18 First Aid Building

A brick structure, 13 x 8 x 9 m, which had a tar paper covered gable roof. A doctor and three nures were employed in this building and administered first aid treatment only.

Point 19 Wind Tunnel

(a) An L-shaped building, 14 x 10 m which housed a small open-ended wind tunnel. The exhaust end of the tunnel faced the main plant building. The wing near the plant was one story high and had a slightly gabled steel framed glass roof. The rest of the building was two storied, with a steep gable roof; the second story extended over the upstream end of the wind tunnel. The tunnel was built from plans which had been begun in Dessau. The plans were completed and the tunnel built, after the Germans arrived in Podberesje. [redacted] It was designed for low speed continuous and high speed intermittent operation, but the speed ranges for each type of operation are unknown to me.

[redacted]

(b) The tunnel was a straight open-ended type, 2.5 - 3.0 m long; the diameter at the throat was 1.2 m. The diameter could be varied by changing wooden inserts, but the length of the test section was fixed. Except for the throat inserts, the tunnel was made of welded steel plate. Flat plexiglass viewing windows, each 30 x 40 cm, were installed on opposite sides of the test section. There was a cylindrical section of the tunnel downstream from the model which was followed by a section that flared out like a funnel. These sections were not changed for different tests. [redacted] 25X1A

(c) For low speed continuous operation, ambient air was forced through the tunnel by means of a fan powered by one JUMO 004 engine. Details of the engine to fan drive mechanism are unknown to me. For high speed intermittent operation, the tunnel intake was connected to a pressure vessel by means of several tubes about 7 cm in diameter. A hand operated, quick acting valve and hand adjustment valves were also installed between the tunnel and pressure vessel. The pressure tank was made of steel of unknown thickness. It was cylindrical and measured 1.5 x 3-3.5 m. An electrically driven compressor (power unknown), filled the tank to an unknown pressure. There were provisions for filtering and drying the air between the compressor and the tank. There was no vacuum chamber.

(d) Main parts of the force measuring system came from Dessau. Minor parts, not available, were made in the plant at Podberesje. As far as I know, the forces were measured by a weight-and-balance system and not electrically. Models were usually mounted on a single strut, [redacted] one set-up where elastic cords were used, presumably to study oscillations of the model. An optical system was planned, but had not been incorporated by September 1950.

(e) A model building shop was located in the wind tunnel building. In this shop, models of steel, laminated compressed wood (brought from Dessau, and unavailable in the USSR), and combinations of both materials were made. [redacted] 25X1A
25X1A wing, empennage, half span, and complete scale models. Full span steel models up to 40-50 cm were tested in this tunnel. Models to be tested by ZAGI (Central Institute of Aerodynamics and Hydrodynamics) in Moscow were made of both laminated compressed wood (EF-132) and steel (EF-140). The largest of these was a full-span model of the EF-140 with a span of approximately 2.5 m. The largest half-span model sent to Moscow measured about 1.75 - 2.0 m from the center-line to the wing tip.

(f) I do not know what the top speed of the tunnel was, but
25X1A [redacted] when a test was run on a half-span model, 350 mm from centerline to wing tip, at speeds in excess of Mach 1 for 1.0-1.2 minutes. At the end of this time the pressure chamber was exhausted. I believe that results of the wind tunnel tests at Podberesje were very good, since most of these tests were checked by ZAGI in their own wind tunnel and corrections of original data were seldom made.

Point 20 Roads

The road (Point 7), was concrete-paved. The road from the entrance (Point 28), along the plant and around the concrete apron (Point 29), was also concrete; the other roads were dirt-covered - with small field stones (not gravel).

Point 21 Warehouse

A brick building, 70 x 14 x 3.5-4.0 m, one story, which had an almost flat wood roof, covered with tar paper. Equipment and materials used in aircraft construction were stored here. Germans were not permitted free access to this building. [redacted] material was stored in bins and racks in a rather orderly fashion. /See Report No [redacted] for Procurement Procedures./

Point 22 Boiler House

A brick building, 35 x 25 x 15 m, three stories high, which had a gable roof, with a steel frame and glass covering. It contained three traveling-grate boilers and one generator, make unknown, and generating capacity unknown. The entire installation in the boiler house was brought from Dessau. Bituminous coal was used as fuel, but its source and consumption are not known. Hot air was sent from this house to the main building, (Point 30), where it was distributed to the workshops by hot air heaters. Hot water produced here was piped to apartment buildings some distance from the plant for central heating purposes. Two compressors, make and capacity unknown, furnished compressed air, five-seven atmospheres, to the various workshops through steel pipes laid above ground. The compressed air pipes in the plant were underground. A pump and filtering installation supplied water from a well to the plant and various buildings in the vicinity. Capacity and pressure are not known. The Soviet master mechanic and his staff had offices on the second and third floors.

Point 23 Smokestack

Brick, 35-40 m high, 4.5-5.0 m in diameter at the base, and attached to the boiler house by an underground flue system. Black smoke was emitted continuously.

Point 24 Lorry Track

Used in bringing coal from the dump (Point 25), to the boiler house. (It could be readily rerouted to reach different points in the dump.)

Point 25 Coal Dump

100 x 30 m, and about 3.5-4.0 m high. Dural tubes were stuck into the coal at irregular intervals to prevent spontaneous combustion. All coal was loaded and unloaded by hand; women were used exclusively for this labor. Coal was brought by barge up the Volga River and unloaded at a landing place on the river /See [redacted], which pinpoints the landing platform./

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Point 26 Transformer Station

A brick building, 15 x 8 x 5 m, flat, and having a slate-covered roof. A 1.0-1.2 m concrete ramp surrounded the station, except for the side nearest the fence. This building contained four transformers, make unknown, transforming the current received from the hydro-electric power plant [redacted] from 10,000 volts to 220 and 340 V. [redacted] information from the Soviet chief mechanic of the plant. There also were switching equipment and circuit breakers, but I have no information regarding this [redacted]

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Point 27 Plant Entrance

Wooden building, 18 x 10 x 8 m, two stories high, and having a gabled roof, covered with tile. There were two rooms and four passages for the workers' use in entering the plant area. Each room had a large window facing each passage, through which Soviet women handed the workers their identification cards. Two passages led to one door, where the employees showed their identification cards to an armed plant guard.

Point 28 Guard House

Wooden building, 4 x 4 x 3 m, which had a flat wooden roof. A plant guard admitted vehicles entering the plant. Upon departure, the cars and trucks were inspected for stolen material and the trip tickets of the trucks were checked.

Point 29 Apron

Concrete, used for functional tests of completed airplanes, such as engine testing, hydraulic system testing, etc.

Point 30 Main Building

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Reference is made to Enclosure (B) of this report, a plan and sectional view of the main plant building. The drawing was scaled from [redacted] Ivankovo. In spite of the fact that the building scaled about 350 m long, [redacted] the building was no longer than 200-225 m. He could not explain the difference, and said that there was no indication of any recent changes in the building except for the addition of the mezzanines along the shops, containing Points 30 K, L, M, and I. In the description of points listed, references to personnel, departments and other matters pertaining to the organization, [redacted]

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Point A Design and drafting section of the OKB-1 (Junkers) Group, departments 14, 15, 16, 17, 18, and 19.

Point B Chemical laboratory of the Siebel Group (OKB-2), Dept 30.

Point C Offices of the Production Chief, Dept 31; Production Planning, Dept 32; and the Chiefs of Quality Control, Dept 39. Quality Control inspectors were also in each of the shops and laboratories.

Point D Offices of the Soviet Plant Director (PP Smirnow), the Soviet Chief Engineer (Wosnizenski), both German Chief Designers (Baade and Roessing, Dept 1), and their secretaries.

Point E Offices of the Soviet Deputy Chief Designer of OKB-2 (Beresniak, Dept 1), and the OKB-2 Preliminary Design Offices (Dept 10).

Point F Soviet plant administration offices (Birukow) and the secret drawing vault (Dept 47).

Point G Siebel design and drafting sections and the office of the Siebel Deputy Chief Designer (Heinsohn, Dept 2).

Point H Rooms containing the library, lofting (Dept 16d), non-secret drawing files and drawing reproduction (Dept 43), and the photographic laboratory (Dept 44). The reproduction equipment consisted of four "red print" (Rot Pause) machines.

Point I Siebel (OKB-2) Electrical Section (Dept 18). On the first floor was a workshop, and the second contained the office and laboratory of Dr Wehde. This group also had installations in the blockhouse (Point 8).

Point J Materials Testing Laboratory (Dept 27). It contained the following equipment:

(a) Three tensile testing machines (Zerreissmaschinen) with 250, 500, and 1000 kg capacities. [redacted] 25X1A Since these figures seemed rather low, [redacted] questioned about the size of the 1000 kg machine. He stated that it was about 4.00-4.25 m high, with the ram raised, and about 3 m high with the ram lowered.

(b) Two impact testing machines (Pendelschlagwerk).

(c) Two bending fatigue testing machines (Pulsator).

(d) Two Brinnel hardness testing machines.

(e) One Rockwell hardness testing machine.

(f) One scratch hardness testing machine (Risshaerte-pruefer).

Point K Offices of Uhl (Dept 3), Technical Liaison (Dept 4), most of the Translation Section (Dept 5), all of OKB-1 Preliminary Design (Depts 10, 11, and 12) except the Chief's office, OKB-1 Servo Mechanisms Design (Dept 20), Fire Extinguisher Design (Dept 21), Handbooks (Dept 22), Vibration Test Engineering (Dept 24), and part of Production Engineering (Dept 26).

Point L Offices of the OKB-1 Deputy Chief Designer (Freytag, Dept 2), Bruno Marks of the OKB-1 Translation Section (Dept 5), Engineering Planning and Purchasing (Depts 6, 7, 8, and 9), Chief of OKB-1 Preliminary Design (Wocke, Dept 10), Project Engineering (Dept 13), and part of Production Engineering (Dept 26).

Point M Offices of the OKB-2 Planning and Procurement (Dept 6), OKB-2 Stress Analysis Section (Dept 14), and the OKB-2 Power Plant Design (Dept 17).

Points N, O, P, Q, R, S, T, U, V, W and X Workshops

The outside walls were reinforced concrete with a steel frame. The long sides had one window after another, 3 m wide and 4 m high. The roofs were steel trusses, covered with wood and tar paper. I do not know what the exact truss construction was; those given in the cross-section view /of Enclosure (B), this report/, are only approximations. The shops had a concrete floor of unknown thickness. Electric lines in the plant were laid in channels in the floor. All machines, except those run by compressed air, had individual electric power.

Point N Tool and jig building section (Dept 37). It contained the following equipment:

(a) Two engine lathes (Spitzendrehbank). Center height above the bed was 500 mm. Center-to-center distance was 3500 mm.

(b) One special shear. This machine could cut mild steel plates up to 12 mm thick. It also had provision for shearing extruded shapes.

(c) Two reciprocating power saws (Buegelsaegen).

(d) Two hand-operated presses (Spindelpressen mit Schwunggewichte).

(e) Four portable oxy-acetylene welders.

(f) Four portable electric arc welders.

(g) One drill press with power feed (Senkrecht-Bohrmaschine), which could drill holes up to 55 mm in diameter.

(h) One radial drill press (Ausleger-Bohrmaschine), which could drill holes up to 55 mm in diameter.

(i) Five bench drill presses (Tisch-Bohrmaschinen).

(j) Three metal straightening tables (Richtplatten).

(k) Two surface plates (Anreissplatten).

(l) Four work benches, each having four vises.

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[redacted]

Point 0 Machine Shop, (Dept 33); it contained the following equipment:

(a) 12-15 engine lathes. The center height above the bed varied from 100-250mm, and the center-to-center distances ranged from 500-2500 mm. Three and four jaw chucks, taper turning attachment, etc, were also available.

(b) Two facing lathes (Plandrehbaenke). One had a 1500 mm diameter chuck, and the other a 2500 mm diameter chuck.

(c) Two reciprocating saws. These were power operated and could handle stock up to 200 mm in diameter.

(d) One circular saw (Kaltkreissaege), which could cut metal up to 250 mm in diameter.

(e) Six shapers (Schnellhobelmaschinen). The maximum stroke of the machines varied from 250-1000 mm.

(f) Two vertical shapers (Stossmaschinen).

(g) Two planers (Langhobelmaschinen). One of these machines had a single tool holder and a bed length of 2500 mm; the other had two independent tool holders and a bed length of 10 m.

(h) Four plain milling machines (Horizontal-fraesmaschinen). Dividing heads were also available.

(i) Three vertical milling machines (Vertikal-fraesmaschinen).

(j) Three gear hobbers (Zahnrad-fraesmaschinen).

(k) One gear grinder (Zahnrad-schleifmaschine).

(l) Two drill presses with power feed (Senkrecht-Bohrmaschinen).

(m) Two radial drill presses (Ausleger-Bohrmaschinen). The arm was about one meter long, 55 mm in diameter, and 550 mm depth.

(n) One horizontal boring mill (Horizontal-Bohrmaschine) which could bore holes up to 750 mm in diameter by 1500 mm deep.

(o) Two precision jib borers (Feinstbohrmaschinen or Lehrenbohrwerk). These machines could bore a hole 500 mm in diameter by 1000 mm deep and were used for making landing gear cylinders.

(p) One surface grinder (Planschleifmaschine); the bed length (travel) was 2500 mm.

(q) Six automatic turret lathes. These machines had six- to eight- position turrets. The center height varied from 75-150 mm.

Point P Equipment assembly shop (Dept 34), which contained the following equipment:

(a) 8-12 oxy-acetylene welding booths.

(b) Six portable electric arc welding machines. There were no facilities for heliarc welding.

(c) Two small hand operated routing shears.

(d) Two hand operated presses.

(e) Five or six bench drill presses (Tisch-bohrmaschinen).

(f) Two steel tables (Richtplatte), 2.5 x 3 m. They were used for straightening metal parts.

(g) Four surface plates (Anreissplatten), 1.5 x 2 m, which were used for part layout work.

Point Q Painting, plating, and heat-treating shop (Dept 38). Spray guns were used for painting, but no booths or exhaust fans had been set up. Anodizing, as well as plating could be done. Any kind of heat treating required in aircraft work could be done in this workshop, but there were no facilities for foundry or forge work.

Point R Hydraulics laboratory (Dept 28).

Point S Sheet metal shop (Dept 35), which contained the following equipment:

(a) Two hand-operated presses.

(b) Two friction drive presses (Friktions-Spindelpressen).

(c) Two metal spinning lathes (Drueckbank).

(d) Four folding presses (Biegemaschinen); two of these were power brakes and two were hand operated folding presses.

(e) Two hydraulic presses. One had a 500 ton capacity and the other 2000; both had been made by pels in Duesseldorf, Germany.

(f) Two squaring shears, foot operated (Blechtafelscheren).

(g) One power shear; the blades were 2.5 m long.

(h) Two ring and circle shears (Randbiegenmaschinen).

(i) Four steel straightening tables; they measured 2.5 x 3.0 m.

(j) Two surface plates.

(k) Three sheet metal rolls.

(l) Twelve work benches, each with four vises.

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[redacted]

Point T Static Test Laboratory (Depts 23 and 40). This laboratory contained the following equipment:

(a) One drop hammer, which was used for part-fabrication and also for drop testing landing gear. (I do not know its capacity.)

(b) One torsion testing machine. Specimens up to 200 mm in diameter could be mounted on this machine and steady or alternating loads of unknown magnitude could be applied.

(c) One bending fatigue test machine. The capacity [redacted] wing 25X1A spars were tested in it.

(d) One electric arc welding machine.

(e) One oxy-acetylene welding rig.

(f) Chain hoists with 1-10 ton capacity.

(g) One five ton overhead traveling crane, which was in the process of being installed at the laboratory.

(h) Approximately 50 loading cylinders. These cylinders were made in Dessau specifically for this purpose. They ranged in size from 5 x 30 cm, to 60-70 x 100 cm.

(i) Structural steel base for mounting test specimens. This was permanently attached to the floor.

Point U Siebel final assembly shop (Part of Dept 36).

Point V Mockup construction shop (Dept 41). In a separate room of this building, temperature and humidity were controlled for gluing and drying. The following equipment was housed in the main construction shop:

(a) Two horizontal wood milling machines (Horizontal-Holzfraesen).

(b) Two vertical wood milling machines.

(c) Two wood planers.

(d) Two joiners (Ober-Fraesen).

(e) Two shapers (Profilfraesen).

(f) Two band saws.

(g) Two circular table saws.

(h) Two disc sanders (Schleifscheiben).

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Point W Assembly shop (Dept 36), which contained the following equipment:

(a) Three spot welding machines (Punkt-Schweiss-maschinen). One AEG and two Siemens-Halske, all stored energy type.

(b) Four bench drill presses.

(c) Two bench shears; they had straight blades about 75 cm long.

(d) Three rivet squeezers (Nietbuegelmaschinen), which were powered by compressed air and had reaches of 50, 75, and 150 cm.

(e) Four automatic rivet making machines; rivets with any shape of head could be made up to 8 mm in diameter and 40 mm in length.

(f) Two electric refrigerators in which "ice box" rivets (purchased parts) were stored.

(g) Three electrically driven, portable hydraulic test stands.

(h) Two test stands for checking the electrical system.

(i) Three portable scales for weight and balance determination (Schwerpunktswaegung).

(j) Boresighting equipment (Nivellieren und Justieren).

(k) Device for measuring and recording the accuracy of contours.

(l) Work benches.

Point X Power Plant construction - OKB-2 (Dept 48).

Operations

3. Zavod #1 was primarily concerned with the design and development of new aircraft for the USSR. Experimental models of most of the new designs were built; but, with one exception, described below, series production was not carried out at this plant. [redacted] Report 25X1A [redacted] the aircraft built at this plant. Report [redacted] deals with the organization and procedures used. [redacted] a group of 50-75 Soviets built about 40-45 missiles similar to the EF-126 or the wartime German V-1 "Buzz Bomb". They were built in a partitioned-off section of the Assembly Shop (Dept 36). Only one German was connected with this project; a Siebel Tooling Engineer (Dept 26), Gerhard Stolberg, did the tooling and jig design work for the Soviets. I have no knowledge of the wing configuration, as the missiles were shipped to an unknown destination before the wings were installed. [redacted] the aircraft were pilotless. Each missile had two Argus-Rohr pulse-jet engines mounted in separate pods above, and slightly outboard of the fuselage. I believe that the engine pods were supported by struts mounted on the wings and horizontal stabilizer. The missiles used spherical fuel tanks identical to those for the EF-126.

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The materials which were used received special handling and were not taken from those to be used for the other projects at Zavod #1. Work on the missile project, however, had top priority. The Junkers Chief Designer, Baade, complained to the Soviet Plant Director, Rebenko, about the interference with his projects. Rebenko told Baade that he, Rebenko, had requested some work at the time when workmen were standing around and Baade had nothing for them to do. It is not known for whom the work was to be done.

4. There were five electric trucks used for moving parts within the plant. There was one crane in the process of being installed in the Static Test Laboratory [redacted] There were three other overhead cranes lying around outside the main building, but at [redacted] any plans for installing them. /Automotive equipment is described in Point 23 of Report No [redacted]

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5. The hydro-electric power plant /See Point 30 of Report No [redacted] furnished electricity at 10,000 v. It was converted in the transformer house /Point 26 of this report/, to 220 and 340 v. The power supply was sometimes interrupted, but such stoppages were rare and only lasted about an hour. The boiler house had one generator of unknown capacity for emergency lighting.

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Security Measures

6. A dural fence (Point 5), surrounded the plant area on three sides. The dike on the lake side completed the enclosure. The road on the dike was closed by barriers located where the fence and dike met. An armed guard was stationed at each barrier. The only openings in the fence were the employee's entrance (Point 27), and the vehicle entrance (Point 28). Employees, both Soviet and German, were issued their identification cards at one of the windows in the plant entrance building. Unusually intelligent Soviet girls dispersed these cards; the girls remembered an individual's features after giving him his card for a week and were able to give all the cards out quite rapidly. The employee would mention his plant number (mine was No 82), and would receive a laminated plant identification card, which had the employee's photograph, name, date of birth, Junkers or Siebel Group, and place of work. These were valid until 2000 hours. Those working later received a "navichod" pass, which permitted exit and entry at all hours. The Plant Director (P P Smirnow), the Chief Engineer (Wosnizenski), the Administrative Deputy (Birukow), and the Chief Designers (Baade and Roessing), had special passes which they did not have to pick up and return each day. Employees had to check their briefcases or other packages at the entrance and were then permitted to walk through a passage to a door leading into the plant grounds. A plant guard, armed with a pistol, would check the identification card with the bearer's features and allow entry.

7. Special lists of those working on Sundays, overtime, and night shifts were given to the girls in the plant entrance. These lists were signed either by the Chief Designers (Baade or Roessing) or the Production Chief (Dreuse) and the Plant Director (P P Smirnow). When leaving the plant, workers were subject to spot checks of their person. Those few persons who had cars were also checked. Despite these measures, much material was taken from the plant. One German, who was caught taking 8 m of electrical wire from the plant, was imprisoned for two years. The employees relinquished their identification cards when they left the plant. Certain sections of the plant were off limits to all

Germans not working in these places. These included the warehouse (Point 21), the transformer house (Point 26), the blockhouse (Point 8), the rocket engine test stand (Point 10), and the rocket fuel bunker (Point 17). The secret drawing archives (Point 30F) were off limits to all Germans.

8. The warehouse guard was strengthened during the night by four dogs fastening to running lines. Each day all non-secret drawings were put into steel cabinets and locked. The doors to the design offices were also locked; the keyes to the cabinets and offices were turned in at the plant entrance each night. All secret drawings were put into steel boxes and taken to the secret drawing vault (Point 30F), which had three locked doors and was guarded. The three locked doors, as well as the door to the drawing vault, were sealed. A special detail checked drafting rooms at night and if any drawings were found on the tables, the responsible employee was summoned to the plant to remove it and put it away properly. He was then cautioned and sometimes fined the following day. The mock-up shop could only be entered by those working there or those possessing a special pass permitting entry to it. Junkers and Siebel engineers could not visit the design departments of the other group, unless they had a special pass. Entrances to the design departments were guarded 24 hours a day.

9. The fire department outside of the plant area, was equipped with two trucks - one fire truck with a motor driven pump and one ladder fire truck with a trailer for hoses. One driver was regularly assigned to this department. 25X1A [redacted] make of the trucks which were used. There were fire hydrants in the plant and in the mezzanines. The pipes were three inches in diameter. Water was pumped from a well by an electrical pump (pressure unknown) in the boiler house (Point 22). The plant did not have an automatic extinguishing system. Carbon tetrachloride hand fire extinguishers were situated at many points in the plant's main building. The fire department drilled at regular intervals, but there were no drills for plant employees.

10. The Soviet workers engaged in semi-military drill after working hours, once a week for about two hours. [redacted] they also engaged 25X1A in weapons handling, parachute jumping, deploying, etc. There were no air raid precaution drills for either Soviets or Germans. The Germans received no in- 25X1A structions whatsoever as to what they should do in case of an air raid. [redacted] 25X1A no protective measures against possible biological or atomic warfare.

11. [redacted] obliged to sign a slip of paper, reading substantially as follows: "I, the undersigned, obligate myself by personal signature to give no details of things seen or heard during my stay in the USSR. This concerns my work as well as things seen or heard outside of the plant in Podberesje and also on trips to Moscow. I understand that contrary behavior will subject me to legal prosecution." The returning Germans also received a clearing slip, which had to be signed by the following sections which were listed: Drawing vault, Drawing archives, Library, Central tool room, Warehouse, Bookkeeping section, Mayor's office (located in Podberesje; to prove that the rent had been paid), Soviet Deputy Chief Designer (for Design Office Personnel), Production Chief Deputy (for people working in the shops), Secret drawing section, and the Plant pass office. After the employee's pass was turned in, he could no longer enter the plant area.

- end -

ENCLOSURE (A) Site Layout, Zavod #1
((B) Main Building at Zavod #1